

# AL AIN POULTRY EFFLUENT TREATMENT PLANT

## AL YAHAR, AL AIN – UAE

### Chicken Slaughtering & Processing Factory

The Al Ain Poultry Farm is not only a leading producer of chicken meat in UAE, but now also a pioneer in environmental protection.

MENA-Water built the most modern plant for the use of highly contaminated wastewater, based on the MBR

technology. The entire wastewater operation will now be prepared by a multistage industrial water treatment plant for use as irrigation water.

**INDUSTRIAL  
WASTEWATER  
400 m<sup>3</sup>/day**



### Industrial Wastewater Treatment

The existing, outdated cleaning system for the entire amount of processing of slaughter, processing, packaging, equipment cleaning and disinfection has been modernized and extended from 240 m<sup>3</sup>/d to 400 m<sup>3</sup>/d.

### Scope and Realization

In February 2013 MENA-Water got the contract for the complete design, construction and commissioning within 8 months. As scheduled the plant was built and successfully put into operation.

The complete plant is operated by PLC and remote monitoring. Now the effluent water can be used for irrigation purpose.

Equipment	Application
<b>Screw Screen</b>	> 3mm particle removal
<b>Lifting Station</b>	Effluent transfer
<b>Fine Screen</b>	> 2mm particle removal
<b>Salsness Micro Screen</b>	Micro screening to 350 micron
<b>Pipe Flocculation</b>	Chemical addition
<b>Dissolved Air Floatation</b>	COD & TSS removal
<b>Aeration Tank No. 1 &amp; 2</b>	Biological treatment
<b>MBR Modules</b>	Ultra filtration
<b>Treated Water Holding Tank</b>	Storage of reclaimed & perishable.
<b>Belt Filter Press</b>	Sludge dewatering
<b>Field Instruments</b>	for flow, level (hydrostatic), TSS, DO pressure
<b>MCC Panel IP 54 Form 2, PLC/HMI</b>	complete treatment process auto controlled





Micron Screen



Outlet of Micron Screen



Dissolved Air Flotation



Membrane Bio Reactor



Sludge Dewatering:  
Outlet of Belt Screen



Plant Control



Steps of Treatment and Clean Outlet